

## CLAIMS

1. Use of an enzyme treated fish protein hydrolysate (FPH) material for the preparation of a pharmaceutical or nutritional preparation for the treatment and/or prevention of atherosclerosis, coronary heart disease, stenosis, thrombosis, myocardial infarction, stroke and fatty liver in an animal.
2. Use of the FPH material for the preparation of a pharmaceutical or nutritional composition for the treatment and/or prevention of hypercholesterolemia.
3. Use of a the FPH material for the preparation of a pharmaceutical or nutritional composition for lowering the concentration of homocysteine in the plasma.
4. Use of the FPH material for the preparation of a pharmaceutical or nutritional cardio protective composition.
5. Use of the FPH material in accordance with one of the preceding claims, wherein said animal is a human.
6. Use of the FPH material in accordance with one of the preceding claims, wherein said animal is an agricultural animal, such as gallinaceous birds, bovine, ovine, caprine or porcine mammals.
7. Use of the FPH material in accordance with one of the preceding claims, wherein said animal is a domestic or pet animal, such as dog or cat.
8. Use of the FPH material in accordance with one of the preceding claims,, wherein said animal is a fish or shellfish, such as salmon, cod, Tilapia, clams, oysters, lobster or crabs.
9. Use in accordance with claim 1, wherein the fish material is fish flesh remnants on salmon bone frames after filleting.

10. Use in accordance with claim 1, wherein the hydrolysis is conducted by the enzyme material is a Bacillus protease complex (Protamex<sup>TM</sup>) .
11. Use in accordance with claim 1, wherein the enzymatic hydrolysis is performed  
5 at a pH in the range of 5,0-8,0, preferable 6,0-7,0, most preferable at about 6,5.
12. Use in accordance with claim 1, wherein the enzymatic hydrolysis is performed at a temperature in the range of 40 - 70°C, more preferable 50 - 60°C, and most preferable at about 65°C.
- 10 13. Use in accordance with one of the claims 1-12, wherein the composition is a food grade product or additive, e.g. an animal feed or pet food.
14. Process for the production of an enzyme treated fish protein hydrolysate (FPH),  
15 characterized in that the process comprises the following steps:
  - a) fish flesh remnants are hydrolyzed with a protease enzyme at a pH in the range of 5,0-8,0, preferable 6,0-7,0, most preferable at about 6,5, and at a temperature in the range of 40 - 70°C, more preferable 50 - 60°C, and most preferable at about 65°C,
  - 20 b) the temperature is elevated to about 90 – 99 °C
  - c) an insoluble fraction was removed by decanting and filtering, and the remaining mixture was separated in a three phase separator into an oil fraction, an emulsion fraction and an aqueous fraction, and
  - 25 d) the aqueous fraction was isolated, and thereafter filtered through a ultramembrane with a nominal molecular weight limit of 100 000, and thereafter spray-dried.
15. Process in accordance with claim 14, wherein the PFH material contains  
30 proteins in the range 70-90%, preferable 80-85%, and most preferable about 83%.
- 16 Process in accordance with claim 14, wherein the amino acid content of the PFH material is as given in table 2.